REMARKS

35 USC Section 112 Rejection:

Claims 24-26 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

More specifically, the Examiner notes claim 24 recites that the fluorocarbon is selected from urethane derivatives, esters, acrylic amides, oligomers and polymers. However, it is unclear to the Examiner how these components are considered to be fluorocarbons

Applicants have amended claim 24 for clarity and have cancelled claim 26. Applicants have attached hereto Exhibits A and B which illustrate the existence of compounds known as fluorourethanes, fluoresters, fluoropolymers, etc. Thus, Applicants respectfully submit that these compounds are readily known as fluorine-containing compounds to those skilled in the art.

Furthermore, Applicants have explained on page 3 of the specification that "fluorocarbons," "fluoropolymers," and "fluorochemicals" each represents a polymeric material containing at least one fluorinated segment.

Thus, Applicants earnestly request reconsideration and withdrawal of this rejection.

35 USC Section 102 Rejections:

Claims 7, 23, and 32-34 were rejected under 35 USC 102(b) as being anticipated by Xiao et al. (US Patent No. 5,747,392).

Applicants have amended claim 7 to include the limitation that both the repellent component and the soil release component are fluorine-containing compounds. Applicants respectfully submit that Xiao fails to teach a composition containing two fluorochemicals.

As such, Applicants respectfully submit that amended claim 7, and claims 23 and 32-34 which each depend either directly or indirectly from claim 7, are not anticipated by Xiao. Thus, reconsideration and withdrawal of this rejection is earnestly requested.

35 USC Section 103 Rejections:

Claims 24-33 were rejected under 35 USC 103(a) as being unpatentable over Xiao et al. (US Patent No. 5,747,392).

Applicants have amended claim 7 to include two fluorine-containing components in the composition. Applicants have cancelled claim 26. Claims 24-25 and 27-33 each depend either directly or indirectly from amended claim 7. As such, Applicants respectfully submit that since Xiao fails to teach a composition containing two fluorochemicals, a *prima facie* case of obviousness has not been established because the reference fails to disclose expressly claimed elements or limitations of Applicants' invention. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Thus, reconsideration and withdrawal of this rejection is earnestly requested.

Claims 7 and 23-34 were rejected under 35 USC 103(a) as being unpatentable over Bullock et al. (US Patent No. 6,251,210).

As stated previously, Applicants have amended claim 7 to include two fluorine-containing components in the composition. Applicants have cancelled claims 23 and 26. Claims 24-25 and 27-34 each depend either directly or indirectly from amended claim 7. As such, Applicants respectfully submit that since Bullock fails to teach a composition containing two fluorochemicals, a *prima facie* case of obviousness has not been established because the reference fails to disclose expressly claimed elements or limitations of Applicants' invention. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Thus, reconsideration and withdrawal of this rejection is earnestly requested.

Claims 7 and 23-31 and 33-34 were rejected under 35 USC 103(a) as being unpatentable over Vogt et al. (US Patent No. 6,238,266) in view of Schmoyer (US Patent No. 4,014,857) or Lipowitz et al. (US Patent No. 4,207,071).

As stated previously, Applicants have amended claim 7 to include two fluorine-containing components in the composition. Applicants have cancelled claims 23 and 26. Claims 24-25, 27-31 and 33-34 each depend either directly or indirectly from amended claim 7. As such, Applicants respectfully submit that the combination of references, either Vogt and Schmoyer or Vogt and Lipowitz, fails to teach a composition containing two fluorochemicals. Thus, a *prima facie* case of obviousness has not been established since the combination of references fails to disclose expressly claimed elements or limitations of Applicants' invention. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Accordingly, reconsideration and withdrawal of this rejection is earnestly requested.

<u>Conclusion:</u>

For the reasons set forth above, it is respectfully submitted that claims 7, 24 – 25, and 29 – 34 now stand in condition for allowance. Should any issues remain after consideration of this Response and Amendment, the Examiner is invited and encouraged to telephone the undersigned in the hope that any such issue may be promptly and satisfactorily resolved.

In the event that there are additional fees associated with the submission of these papers, authorization is hereby provided to withdraw such fees from Deposit Account No. 04-0500.

Respectfully requested,

September 26, 2005

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Exhibit A

Fluorothane Hydrophobic and Super-Hydrophobic Coatings

Note: See FluoroPel for fluoropolymers, FluorN for fluorosurfactants, and FluoroSyl for flluorosilanes. FREE Up to three samples may be obtained nationally and internationally by providing a FedX account number to cover shipping. Statement about PFOA and PFOS.

Fluorothane ME 1.03

Fluorothane ME 1.03 is a single-part, air-cured fluorourethane alkyd spray coating in a fluorinated solvent with excellent water repellancy (contact angle 150°) and resistance to weather and UV. This version of the M-series Fluorothanes is especially suited to application over polyolefin foams and other hydrophobci surfaces. Fluorothane ME applied to microwave dishes and radomes may be expected to remain hydrophobic, reducing rain attenuation or rain fade for 10 years or more (UV and rain data). The coating is rain resistant after 30 minutes, substantially cures in 24 hours and is fully cured in 5 to 10 days. Application temperatures should be between 32° and 75°F. One pound covers 30 to 60 square feet.

Residential and commercial applications to marine and ground-based microwave antenna.
$56 per pound , $144 per quart (3 lb). MSDS

Fluorothane MP 1.00

Fluorothane MP 1.00 is a single-part, air-cured fluorourethane alkyd brush or roll coating in an organic solvent with excellent water repellancy (contact angle 150°) and resistance to weather and UV. Fluorothane MP applied to microwave dishes and radomes may be expected to remain hydrophobic, reducing rain attenuation or rain fade for 10 years or more (UV and rain data). The coating is rain resistant after 6 hours, substantially cures in 24 hours and is fully cured in 5 to 10 days. Application temperatures should be between 70° and 95°F. One gallon covers 250 to 400 square feet. NEW! DIRECTV Outdoor Test

Residential and commercial applications to marine and ground-based microwave antenna.
$56 per pint, $90 per quart, $200 per gallon.

Fluorothane MW 1.00

Fluorothane MW 1.00 is a single-part, air-cured fluorourethane alkyd brush or roll coating in both organic fluorinated solvent with excellent water repellancy (contact angle 150°) and resistance to weather and UV. This version of the M-series Fluorothanes has the broadest application temperature range. Fluorothane MW applied to microwave dishes and radomes may be expected to remain hydrophobic, reducing rain attenuation or rain fade for 10 years or more (UV and rain data). The coating is rain resistant after 6 hours, substantially cures in 24 hours and is fully cured in 5 to 10 days. Application temperatures should be between 32° and 95°F. One gallon covers 250 to 400 square feet. NEW!

Residential and commercial applications to marine and ground-based microwave antenna.
$60 per pint, $95 per quart, $220 per gallon.

Fluorothane GE

Fluorothane GE is a hydrophobic (Ø > 110°) single-part fluorourethane alkyd coating in a non-flammable fluorinated solvent system. The GE coating has a gloss finish that will amber slightly after extended uv exposure but has excellent weather resistance and may be applied over most surfaces. GE substantially cures in 24 hours and is fully cured in 3 to 7 days. One liter covers 150 to 300 square feet.

Applications to mobile, marine and aircraft radomes.
$210 per liter (1/02) MSDS

Fluorothane TFA Top Coat

Fluorothane TFA Top Coat is an aliphatic fluorourethane-fluoropolymer coating in a fluorinated solvent and is intended for application over uncured Fluorothane GE or G5 primers to provide increased hydrophobic and oleophobic properties. The coating substantially cures in 24 hours and is fully cured in 3 to 7 days. One pound TFA covers 50-100 square feet. MSDS

Top coat for ground, marine and aircraft microwave antenna.
$132 per pound (3/01)

Fluorothane TFA-G5-900 KIT

Fluorothane TFA Top Coat is a smooth, glossy aliphatic fluorourethane-fluoropolymer coating in a fluorinated solvent and is intended for application over "wet" Fluorothane G5 Primer. TFA-G5-900 has excellent water repellancy (Ø=120°) and solvent and abrasion resistance. Fluorothane TFA has moderate uv resistance and will remain hydrophobic for 1 to 5 years with intermittant sun exposure. The top coat/G5 primer coating substantially cures in 24 hours and is fully cured in 3 to 7 days; cure may be accelerated with heat. One pound covers about 50 square feet. MSDS

Fluorothane G5 Primer is a two-part aliphatic fluorourethane coating in an aromatic solvent system. The primer has excellent abrasion, weather and uv resistance and may be applied over most solvent resistant surfaces. MSDS

Commercial applications to aircraft weather radomes. One pound kit includes: one pound TFA Top Coat, one pound G5 Primer. APPLICATION
$235 per pound (11/99)

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8000 Virginia Manor Road
Beltsville, MD 20705

phone: (888) CYTONIX
fax: (301) 470-6269

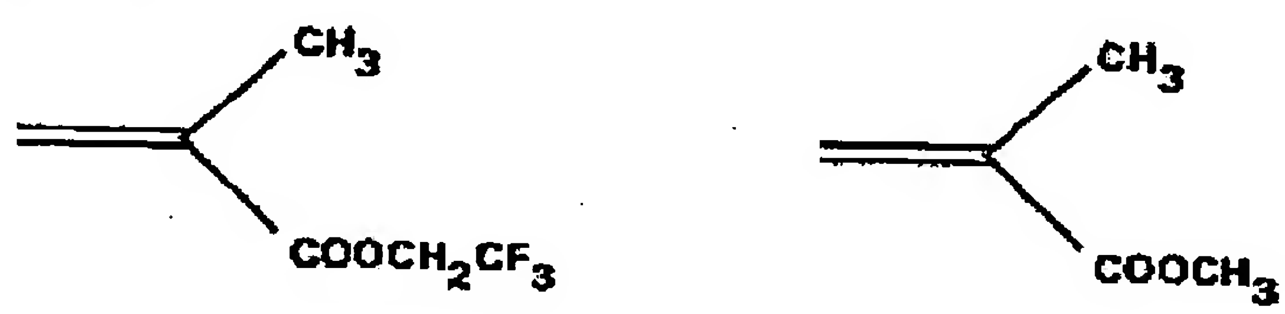
Exhibit B

Posted on: 09/26/2000

New Flourine-Containing Monomer

By Dr. Koji Kato / Sales Manager, F-TECH INC., Japan

This article discusses the properties, manufacturing method and applications of a fluorinated monomer, 2,2,2-trifluoroethyl methacrylate or, more simply, Fluorester.



2, 2, 2-Trifluoroethyl Methacrylate (Fluorester) | **Methyl Methacrylate (MMA)**

Figure 1 / Chemical Structures of Fluorester and Methyl Methacrylate

Fluorine-containing monomers are used in a variety of coatings applications because of their heat and chemical resistance, weatherability, low refractive index, non-cohesiveness, water and oil repellency, and electric insulating properties.

In the past, since fluorine-containing monomers were insoluble in solvents, high-temperature curing was required, and application was limited. To overcome this problem, various solvent-soluble fluoropolymers have recently been developed. For example, Kynar™-SL and ADS are normal-temperature drying type solvent-soluble polymers obtained by copolymerization with vinylidene fluoride (VDF) and tetrafluoroethylene (TFE) or hexafluoropropylene. Copolymers of fluoro olefin and hydrocarbon olefin, as represented by Lumiflon™, are multi-dimensional copolymers formed between fluorine-containing vinyl monomer, such as chlorotrifluoroethylene (CTFE), and hydrocarbon-type vinyl ethers. These are fluorine-containing monomers for paint that have excellent weatherability.

However, in paint films prepared with these monomers, it is hard to say that the unique features of fluorine-containing compounds such as non-cohesiveness, water and oil repellency, and stain resistance are fully realized. In addition, fluorine-containing monomers (VDF, TFE and CTFE) are raw materials that are available in the form of reactive gases, which are difficult to transport. TFE is especially difficult. For this reason, it is almost impossible for paint manufacturers to polymerize monomers for fluoro paint by itself.

Fluorester is similar to typical methacrylate monomers, but has the features of a

fluorine-containing monomer. This makes it possible to develop various types of fluorine-containing paint without encountering any special restrictions in their development.

What is Fluorester?

Table 1 / Properties of Fluorester

	Fluorester	MMA
Molecular weight	168.12	100.12
Boiling point °C	107	101
Specific gravity, g/cm³	1.181	0.94
Refractive Index, nD_{25}	1.359	1.412
Flash point, °C, closed cup	24.5	13
Viscosity, mPa•s, 20°C	0.65	0.58
Solubility, wt%, 20°C		
Water to monomer	0.18	1.0
Monomer to water	0.04	1.7
Vapor pressure, kPa, 20°C	2.2	3.7

Table 1 / Properties of Fluorester

Fluorester is an ester of methacrylic acid and 2,2,2-trifluoroethanol (TFEA). CF_3CH_2OH Unlike polymers whose main chain contains fluorine, the polymer of this compound has excellent water repellency and stain resistance because it contains fluorine in its side chain. Like ordinary methacrylates, Fluorester is a transparent and colorless liquid that can be polymerized. Like methylmethacrylate (MMA), it can be used readily as a constituent of solvent-type thermoplastic, thermosetting and emulsion-type paint, for example. The physical and chemical properties of Fluorester are compared in Table 1 with of those of MMA.

In the past, Fluorester was manufactured by the esterification reaction of TFEA and methacrylic acid. However, this esterification reaction required a large amount of acid catalyst because the nucleophilic property of TFEA was weak. Additionally, the conversion rate of TFEA was not sufficient.[1]

F-Tech has succeeded in developing a technology[2] capable of hydrolyzing 1-chloro-2,2,2-trifluoroethane (HCFC-133a) in (Greek upsilon)-butyrolactone. As a result, the company became the world's largest producer of TFEA. Based on TFEA manufacturing technology, the company is developing a large-scale production technology in which Fluorester can be manufactured directly from HCFC-133a and potassium methacrylate. Thus, it became possible to supply this compound at lower costs by using its existing facilities and establishing an effective production system capable of coping with the changing demand.

Characteristics of Fluorester Polymer[3]

Table 2 / Q and e Value of Fluorester

Monomer	Q	e
$CH_2{=}C(CH_3)COOCH_2CF_3$	1.13	0.98
$CH_2{=}C(CH_3)COOCH_3$	0.74	0.40
$CH_2{=}CHCOOCH_3$	0.42	0.60

Like MMA, Fluorester easily polymerizes by free radical polymerization, as well as

bulk, solution or emulsion polymerization. In the bulk or solution polymerization, an organic peroxide like benzoyl peroxide and an azo-type free-radical initiator like azobisisobutyronitrile are used. In the emulsion polymerization, a water-soluble initiator such as potassium persulfate or ammonium persulfate is used.

Fluorester has Q and e values,[4] as shown in Table 2, and is able to copolymerize with ordinary vinyl monomers such as acrylic esters, styrene, acrylonitrile and vinyl acetate, and other fluorine-containing acrylic esters.

Table 3 / Glass Transition Point and Mechanical Strength

Homopolymer	Tg (°C)	Breaking Point (kgf/cm²)	Elongation (%)	Hardness (Vickers)	Hardness (Rockwell)
Fluorester	82	263	6.3	16.7	47
MMA	123	620	3.1	20.5	90

The homopolymer of Fluorester is a transparent and amorphous polymer that has a glass-transition temperature (T_g) of 82°C.[5] Compared with MMA, its T_g is lower. However, it maintains a sufficiently high hardness[3] and is considered to be suitable for coatings (see Table 3).

Table 4 / Refractive Index

Homopolymer	Refractive Index, nD25
Fluorester	1.415
MMA	1.490

The atomic radius of the fluorine atom is small for its atomic weight; thus the fluorine atom is very compact. Due to the strong mutual attraction between the electrons and the nucleus, the polarization of the fluorine atom is small and its electronegativity is the highest among all the elements. In addition, the distance of the C-F bond is short and the bonding energy is higher than that of other bonds. As a result, the polarizability of the C-F bond becomes smaller, lowering the refractive index and dielectric constant of fluorine compounds. For this reason, the refractive index[6] of the homopolymer of Fluorester is lower compared with that of the MMA polymer (see Table 4).

Table 5 / Critical Surface Tension

Homopolymer (dyn/cm)	γc	Fluorine Content (wt%)
Methyl methacrylate	38	0
Fluorester	19	34
Tetrafluoroethylene	18.5	76

A smaller polarizability value means that the intermolecular force is lower. This leads to a decrease in the cohesive energy between molecules and lowers the surface free energy (a force to draw the molecules existing on the surface into the inside) of the polymer, thereby making the polymer less wettable and adhesive. The Fluorester homopolymer has much better water repellency than the MMA polymer.[6] The critical

surface tension [(Greek upsilon)c] indicates the degree of wetting difficulty on a solid surface. The smaller this value, the harder the wetting of a solid surface becomes (see Table 5).

In fluoropolymers, the(Greek upsilon)c is determined by the structure of the side chain. In the TFE (Teflon) polymer, which has fluorine in the main chain, the weight ratio of fluorine atoms in the molecular weight is as high as 76%, but its (Greek upsilon)c is only 18.5 dyn/cm. In general, because copolymers of fluoro olefin and hydrocarbon olefin (that are used for fluoro paint) contain fluorine only in their main chain and hydrocarbon vinyl monomer is used for their copolymerization to increase their compatibility, the content of fluorine decreases further, thereby leading to a larger (Greek upsilon)c value. By contrast, in the case of Fluorester homopolymer in which fluorine is introduced in its side chain, its gc value is 19.0 dyn/cm or near that of Teflon, although the weight ratio of fluorine in its molecular weight is only 34%. The characteristics such as non-cohesiveness and water and oil repellency, which are often the main purpose in the introduction of fluorine into paint, become stronger with the decrease in the (Greek upsilon)c value.

Type of Paint Using Fluorester

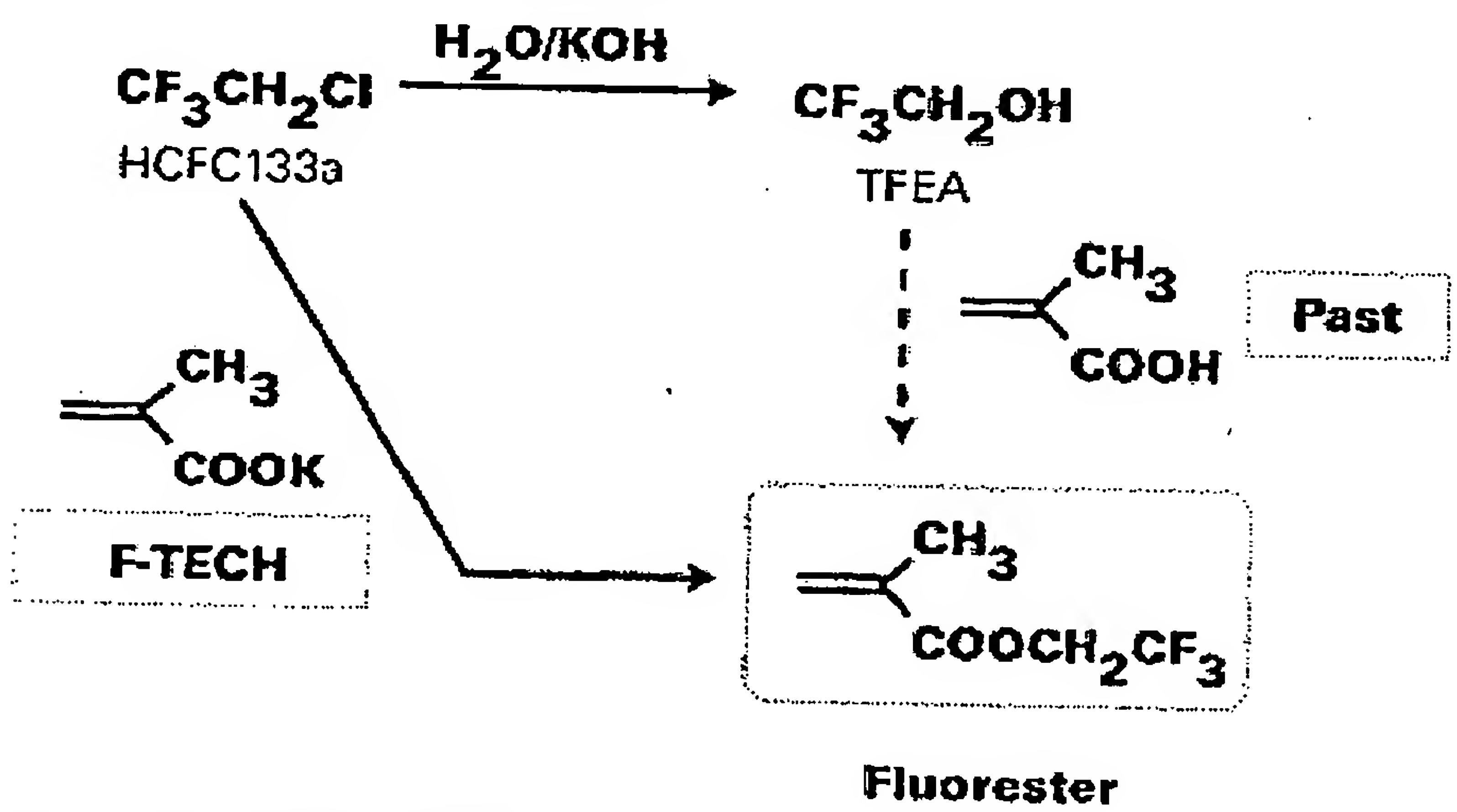
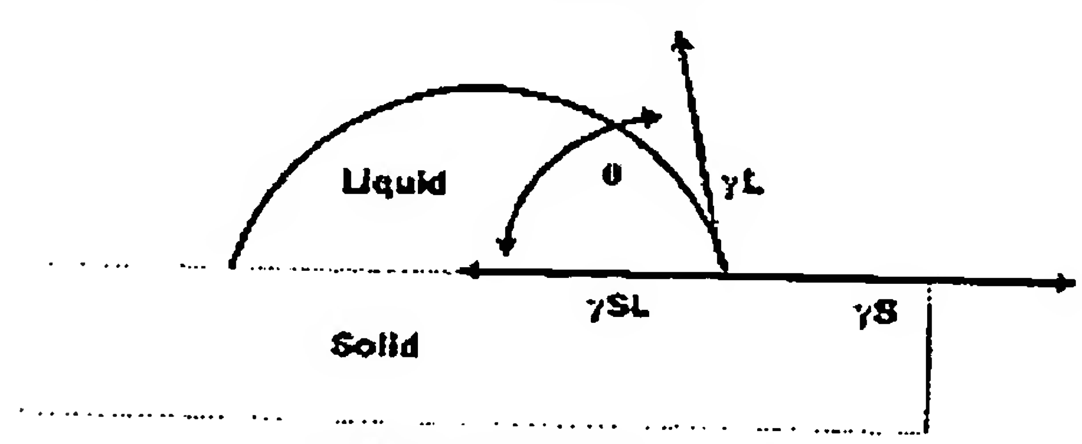


Figure 2/Fluorester Process

Various types of paints using trifluoroethyl methacrylate have been reported. Based on the paint-related patents applied in the past, they were classified as illustrated in the following sections.

Solvent-Type Thermoplastic Paint



$\gamma S = \gamma SL + \gamma L \cos\theta$

Critical Surface Tension $\gamma c = \gamma L$ ($\cos\theta = 1$)

Figure 3/ Critical Surface Tension

As trifluoroethyl methacrylate can easily copolymerize with other acrylate-type monomers, it is most suitable for formulating coatings. A typical thermoplastic acrylic polymer for paint contains MMA as its main ingredient, and alkyl methacrylate ester or

alkyl acrylate ester to improve the impact resistance and adhesive properties of the resulting coating. It is known that the chemical resistance and weatherability of paint increases by copolymerizing Fluoroester with acrylic monomer for paint. For instance, Atomix Co. has obtained an excellent coating by copolymerization of butyl methacrylate (66%) and trifluoroethyl methacrylate (16%) with disulfide reformulating with polyisocyanate.[7] This coating did not change, even when kept in 50% sulfuric acid or 10% caustic soda solution for one week. It also had excellent weatherability.

Thermosetting Paint

Trifluoroethyl methacrylate can polymerize with polymers that have a reactive functional group in their side chain such as (meth)acrylic acid, hydroxyalkyl acrylate and hydroxyalkyl acrylamide. Its use in thermosetting paint has been reported. In the case of thermosetting paint, if the compatibility between vinyl-based copolymer and curing agent is insufficient, there can be decrease in the gloss of the hardened paint film, and a chalking phenomenon or cracking can take place. These defects are caused by hydrolysis with moisture. Therefore, the problems such as durability and weatherability are thought to be solved by the copolymerization of water-repellent trifluoroethyl methacrylate. In addition, it is known that stain resistance, which is one of the features of thermosetting paint, increases further as a result of the addition of this compound. As a crosslinking component, a polymer that has the same reactive functional groups as those of normal thermosetting paint is used. For example, Mitsubishi Rayon Co. has reported paint in which carboxyl-group containing acrylic resin[8] or melamine resin[9] was used.

Emulsion-Type Paint

The expectation of the development of emulsion-type paint containing fluorine has been high from the viewpoint of environmental problems. However, in the case of the copolymer of fluoro olefin and hydrocarbon olefin, there was a problem concerning the mechanical and chemical stability of the resulting latex. To solve this problem, it was necessary to consider using graft polymerization using a hydrophilic monomer. On the other hand, in the case of ordinary acrylic emulsion type paint, it is necessary to add an emulsifying agent in the polymerization. The existence of the emulsifying agent causes a problem with the stability of the latex. Trifluoroethyl methacrylate has properties close to those of ordinary acrylic monomers, although it is a fluorine-containing monomer; therefore it does not affect the mechanical and chemical stability of the latex. Instead, due to the surface-active effect by fluorine, this monomer stabilizes the emulsion in the polymerization process, making it possible to carry out the polymerization without an emulsifying agent.[10] Recently, a latex that was stabilized using a small amount of this monomer produced a stable aqueous system. According to a report by ATOFINA Chemicals Inc. (formerly Elf Atochem),[11] paint thus produced has excellent hydrophobic properties, although it is a waterborne paint.

UV-Curing Type Paint

A UV- or EB-curable paint in which no solvent or water was used has been developed because of pollution/environmental concerns. Like the case of MMA, it is difficult to polymerize trifluoroethyl methacrylate by the irradiation of light. It is most appropriate to copolymerize it with some photo polymerizing monomer, and use the resulting copolymer as a photo crosslinking substance. ATOFINA has reported the manufacturing of a paint that was prepared by carrying out the graft polymerization between an oligomer of trifluoroethyl methacrylate, glycidyl methacrylate and acrylic acid. The resulting copolymer is UV cured, and the coating is hydrophobic.[12]

Application Fields of Fluorester

There are many application reports based on trifluoroethyl methacrylate, due to the characteristics inparted by fluorine. The following patent references give potential applications.

Coating Formulations

The most important features of trifluoroethyl methacrylate polymers are weatherability, water repellency and stain resistance. Some examples of paint that was formulated for this purpose have been reported. Atomix Co. has patent applications[13] for the formulation of epoxy paint, in addition to that of acrylic paint[7] described previously. They reported that both types of coatings were able to increase their resistance to acids and alkalis, as well as their weatherability.

Kynar is prepared by blending fluorine-based copolymer consisting mainly of vinylidene fluoride with acrylic resin. It has been reported by Dainippon Ink and Chemicals[14] that Kynar was further formulated with the compound Fluoroester, and its weatherability and its resistance to corrosion and stain increased. Meanwhile, Daikin Industries[15] and JSR Corp.[16] have reported that by formulating vinylidene fluoride polymer with Fluorester, they succeeded in manufacturing glossy paint with excellent weatherability and stain resistance. The reason that the conventional fluoro paint, which had fluorine in the main chain, was able to be reformulated is due to the fact that the fluorine of this polymer exists in the side chain.

Surface Modification

As a method of modifying the surface of steel materials coated with various kinds of polymer, Nisshin Steel Co.[17] has reported a method in which a steel material was first coated with acrylate and then the polymerization of the coating was carried out using EB irradiation. A polyester coated steel material was coated with trifluoroethyl methacrylate and then irradiated with electron beams to graft the formulated monomer. It is reported that the water repellency of the surface increased. Seiko Kasei[18] reported similar results for PVC coated with a copolymer of this monomer for a variety of applications. Improvements in stain resistance, weatherability and lubricity of the surface were found.

Electrocoating

Electrocoating is used for the corrosion protection and surface finishing of building materials and automobiles because it is a flawless way to coat. As trifluoroethyl methacrylate is able to be emulsified, it is suitable for electrocoating. Honey Kasei[19] reports that when electrocoating using this compound as a component, it succeeded in producing glossy paint films with excellent chemical and stain resistance, which had been difficult to obtain by the conventional fluoro-resin painting method.

Antistatic Paint

Sekisui Chemical Co.[20] has developed an electroconductive paint containing tin oxide powder. This transparent paint can easily be UV or EB cured, and has excellent abrasion resistance. It is used as an antistatic paint. It was reported by the company that by copolymerizing the fluoroester monomer with that paint the stain and abrasion resistance as well as the hardness of the paint increased.

Other Special Paint

The possible use of trifluoroethyl methacrylate as a component for various special paints is under study. For example,[21] this compound was used for the protective coating for airplanes due to its high chemical resistance. This coating has excellent adhesive properties for thermosetting and thermoplastic materials and does not deteriorate even in 75% sulfuric acid. This is of interest because aircraft are always exposed to harsh environments, often accompanied with acid rain.

An example in which a copolymer[22] of trifluoroethyl methacrylate was used for the coating of an asphalt-road surface has been reported by ATOFINA. They also reported that by using that copolymer for the marking of pedestrian crossings, it became possible to reduce the number of remarkings. This is an example in which the

weatherability, adhesive properties and abrasion resistance of this compound were fully used.

A case in which a copolymer of trifluoroethyl methacrylate, styrene and MMA was used as a glazed coating for paper has been reported by Mitsubishi Rayon Co.[23] The glazing process for paper is necessary to provide the gloss to printed paper and protect its surface. It was also reported that blocking and collapsing resistance improved.

Conclusion

F-Tech offers a monomer that is as easy to handle as MMA while having various characteristics unique to fluoro monomers. However, as its price was high, its commercial development for coatings has been slow, despite many reports on the usefulness of its application to paint. F-Tech intends to cooperate with users to develop more applications for the material.

For more information on fluorine-containing monomers, contact F-TECH Inc., 2-5 Kyobashi 3-chome, Chuo-ku, Tokyo, Japan; phone 81-3-3274-1301; fax 81-3-3274-1211; visit www. f-techinc.com.jp; e-mail kato@f-techinc.co.jp; or Tosoh USA, Robert Schmunk, 1100 Circle 75 Parkway, Suite 600, Atlanta, GA 30339; phone 800/221.4801 or 770/956.1100; fax 770/956.7368.

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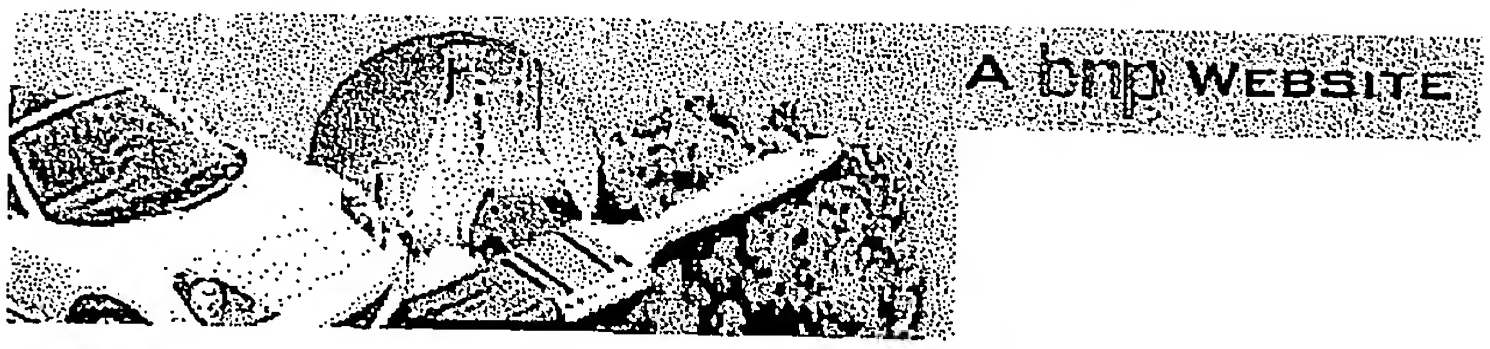
16 JP 93-194668.
17 JP 88-137778.
18 JP 92-363370.
19 JP 89-203481, JP 92-1378, JP 92- 25571, JP 92-202381, JP92-202382.
20 JP 86-42577.
21 JP 88-301266.
22 JP 94-92518.
23 JP 92-25569.

Related Websites

- F-TECH Inc. www.f-techinc.com.jp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